



IN THE UNITED STATES  
PATENT AND TRADEMARK OFFICE

**PATENT APPLICATION**

**INVENTORS:**

Kiem-Phong Vo

**RECEIVED**

NOV 10 2004

Technology Center 2600

**DOCKET NO.:** 2001-0173

**TITLE:** REAL TIME REPLAY SERVICE FOR COMMUNICATIONS NETWORK

**SERIAL NO:** 010/015,516

**GROUP ART UNIT:** 2684

**FILING DATE:** 12/13/01

**EXAMINER:** TRIN, TAN H

**COMMISSIONER FOR PATENTS**  
**ALEXANDRIA, VA 22313-1450**

**DECLARATION UNDER 37 C.F.R 1.131**

I, Kiem-Phong Vo, of 80 Swenson Circle, Berkeley Heights NJ 07922,  
declare the following:

I am the inventor named in the application identified above;

I made the invention described and claimed in that application prior to April  
26, 2001;

As evidence of that declaration, attached to this paper are copies of:

1. An e-mail message dated March 15, 2001, from me to David  
Belanger, to whom I reported in the AT&T organization structure at the time.

The message describes the subject matter claimed in my patent  
application. The e-mail message was also addressed to Robert Canavan

([rcanavan@att.com](mailto:rcanavan@att.com)) who was the patent attorney assigned to my technical organization.

2. An e-mail message dated March 16, 2001 addressed to Robert Canavan, patent attorney, conveying as attachment describing the work in my e-mail message of March 15 (above).

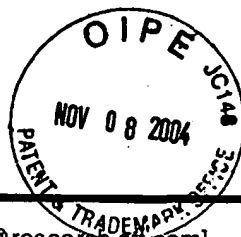
3. A patent disclosure letter dated March 16, to David Belanger from Robert Canavan, documenting the establishment of a patent study item, which item corresponds to the work referred to in the e-mails above, and to the subject matter claimed in my patent application. As indicated on that letter I was sent a copy of the letter.

Declarant acknowledges that willful false statements and the like are punishable by fine or imprisonment, or both (18 U.S.C. 1001) and may jeopardize the validity of the application or any patent issuing thereon. All statements made of the declarant's own knowledge are true and that all statements made on information and belief are believed to be true.

Date: 11/05/2004

  
Declarant

Canavan, Robert T - LGA



From: Phong Vo [kpv@research.att.com]  
Sent: Thursday, March 15, 2001 2:26 PM  
To: dbelanger@att.com; kpv@att.com; rcanavan@att.com  
Cc: dgb@research.att.com  
Subject: RE: Real time voice replay

Bob, in that case, we should go ahead and file an application. Phong.

> From rcanavan@att.com Thu Mar 15 09:01 EST 2001  
> To: "Vo, Kiem-Phong (Phong) - ALRES" <kpv@att.com>, "Belanger, David G (Dave) -  
ALRES" <dbelanger@att.com>, "Canavan, Robert T - LGA" <rcanavan@att.com>  
> Subject: RE: Real time voice replay

> Phong,

>  
> As you know, I have been working with Ram on a patent application for a  
> conversation recording service. Among other things, we are claiming the  
> capability of automatically recording all calls or selected calls. Your  
> idea of having a short-term, continuous buffer available to a caller is  
> clearly distinguishable. I have not run across any anticipating prior art  
> in the preliminary searching I have done for Ram's application.

> Bob

> -----Original Message-----

> From: Phong Vo [mailto:kpv@research.att.com]  
> Sent: Wednesday, March 14, 2001 11:52 PM  
> To: dgb@research.att.com; rcanavan@lga.att.com  
> Subject: Real time voice replay

> Dave&Bob,

>  
> During Iana's talk this morning, he said something to the effect that  
> packet voice still needs to improve quite a bit to avoid jitters which  
> disrupt the conversation flow. But this got me to thinking that the  
> purpose of a conversation is to transfer information and jitters or  
> stammering/coughing are just things that disrupt this transfer process.  
> Often, all that is needed to resync is to ask the other party to repeat.  
> Now, since the human machine is not perfect, repeating is not always  
> faithful.

>  
> So an idea is this: since packets are just data and data can be stored  
> and replayed, we can provide a feature that buffers voice data for  
> some short duration, say the past 5, 10 or 30 minutes and allow the  
> users to rewind and replay this during their conversation. This feature  
> can be implemented as a part of a network edge processor, a broadband  
> phone or a cable modem.

>  
> I am not sure if this is new. But if it is, it's probably worth  
> patenting. What do you think?

> Phong

**Canavan,Robert T - LGA**

---

**From:** Phong Vo [kpv@research.att.com]  
**Sent:** Friday, March 16, 2001 12:29 AM  
**To:** rcanavan@lga.att.com  
**Subject:** instant replay of a conversation



rv.txt

Bob, below is the form proposing the idea of doing instant replay of a conversation. Phong



**Robert T. Canavan**  
Senior Attorney  
Intellectual Property Law

Room 3249G2  
295 N. Maple Avenue  
Basking Ridge, NJ 07920-1002  
Telephone: 908 221-4535  
FAX: 908 221-5783  
E-mail: rcanavan@lga.att.com

Date: March 16, 2001

To: David G. Belanger

Patent Disclosure No. 2001-0173 was docketed on March 16, 2001 and has been referred to the User Experience Intellectual Property Review Team to consider the patentability of the above-identified subject matter. Kiem-Phong Vo appears to be the originator.

The subject matter of this disclosure may be summarized as follows:

A conversation is a forum in which participants attempt to transfer information in real time to one another via means such as voice, keyboards, wireless devices etc. Currently, such transferred data are assumed to be immediately consumed by the receiver (s), then disappear. Examples of conversations include telephone calls, conference calls, electronic drawing boards and instant messaging. But data transmission can be briefly interrupted or loss. For example, during a conversation conducted via a telephone network, voice data can be corrupted by jitters on the network circuit or they may be received but not properly processed because the listener got distracted by some external events (e.g., baby crying). In such cases, instant replay can be helpful to resynchronize the conversation. We propose that instant replay can be implemented as a feature of the data transfer medium via some combination of the network, broadband phone, cable modem, or instant messaging module by buffering the last n units (minutes, lines of text, etc.) of a communication for some appropriate n.

Please notify me (908) 221-4535 of any changes in either the technical or commercial aspects of the disclosure. It is also important that I be informed of any relevant work by others, either in or out of the AT&T family, as well as to any AT&T or non-AT&T product which may utilize this subject matter.

Robert T. Canavan  
Senior Attorney  
AT&T Intellectual Property – Law  
Room 3249G2  
295 North Maple Ave.  
Basking Ridge, NJ 07920

cc: Kiem-Phong Vo